REMARKS

This Amendment is responsive to the Office Action identified above, and is further responsive in any manner indicated below.

PENDING CLAIMS

Claims 1-59 were pending and under consideration in the present application, and Claims 1-14 and 37-59 were subject to examination in the Office Action. Appropriate claims have been amended, canceled and/or added (without prejudice or disclaimer) in order to adjust a clarity and/or focus of Applicant's claimed invention. The claims submitted herein have been marked and renumbered to reflect proper reissue amendment format under 37 CFR §1.173. At entry of this paper, Claims 1-37 (equivalent to previously-pending Claims 1-14 and 37-59) and new Claims 38-40 will be pending for further consideration and examination in the application.

RESTRICTION/ELECTION REQUIREMENT - TRAVERSED

The constructive restriction/election is continued to be traversed. However, in order to travel a path of least resistance, disputed withdrawn claims 15-36 have been canceled (without prejudice or disclaimer).

IMPROPER AMENDMENT TO REISSUE

Regarding the Office Action contention that Applicant's prior paper made amendments via an improper format, care has been taken within the present paper

to insure that proper reissue amendment format was followed. Any inconvenience caused by any prior improper amendment format is respectfully regretted.

SUPPLEMENTAL REISSUE OATH/DECLARATION

Rather than obtaining/filing a supplemental reissue Oath/Declaration at this stage of prosecution, and then (should the claims or other changes be made) possibly having to obtain/file one or more supplemental reissue Oaths/Declarations in any future stages of prosecution, Applicant respectfully submits that a supplemental reissue Oath/Declaration will be filed at the end of prosecution when all other issues/rejections have been resolved and no more claim or other changes are to be made. Accordingly, when the supplemental reissue Oath/Declaration becomes the only issue barring allowance of the application, the Examiner is invited to call the undersigned at the local D.C. area number of 703-312-6600, to provoke accelerated preparation/filing of the final supplemental reissue Oath/Declaration to move the application to allowance.

CLAIMS 1-14

Except for the issue of improper amendment formatting and the issue of the allegedly defective Oath/Declaration (treated elsewhere in this paper), Claims 1-14 are not in dispute; thus, such claims are not significantly amended from Applicant's prior submission. Applicant and the undersigned respectfully thank the Examiner for apparent approval of Claims 1-14. Renewed consideration and approval of such claims are respectfully requested.

RECAPTURE REJECTION - TRAVERSED

For the purposes of clarity and convenience, the following discussions will use the previously-pending claim numbers, *i.e.*, Claims 37-59, solely to coincide with the specific rejections detailed hereinbelow.

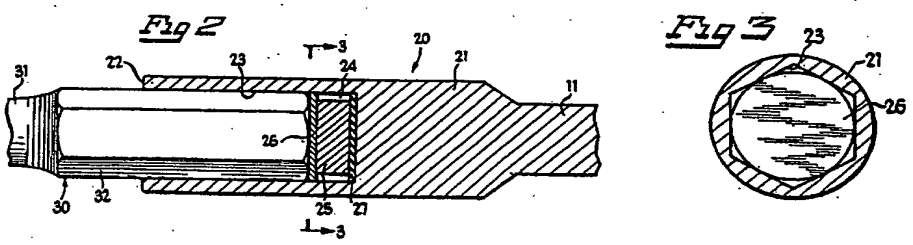
The recapture rejection of Claims 37-59 as set forth within the section numbered "5" beginning on page 5 of the Office Action is respectfully traversed. A recent USPTO Board opinion may be relevant.

ex parte Eggert Discussion:

Attention is directed to the relatively-recent precedential USPTO Board opinion of *ex parte Eggert*, Appeal No. 2001-0790, decided 29 May 2003, concerning US Patent No. 5,577,426 (unrelated to the present application). In such case, the Board **REVERSED** the Examiner's attempt to apply recapture to reject the application. Background teaching of the *Eggert* opinion is relevant for understanding of traversal/rebuttal of the present rejection in Applicant's application. Hence, discussion is now provided herewith for convenience.

The invention in *Eggert* was related to a magnetic bit holder. Two embodiments were at issue in *Eggert*'s appeal; such two embodiments are briefly described on the next two pages.

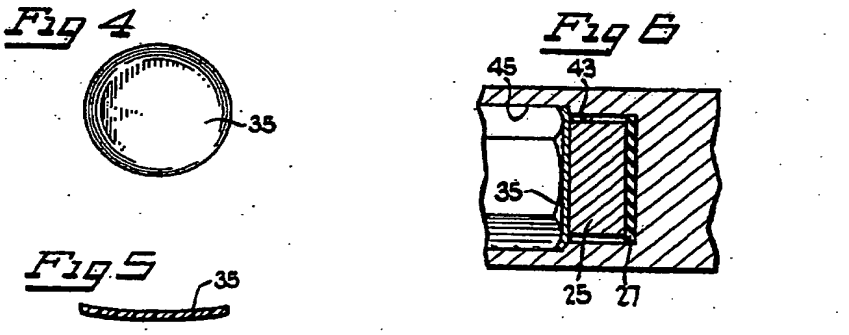
The first embodiment is shown in *Eggert*'s FIGS. 2 and 3 as follows:



First Embodiment of Eggert

Figure 2 shows a bit holder 20 having a magnet 25 held in place by a retainer 26 which is made of suitable metal and is shaped as a fiat circular disk. See column 2, line 53 - column 3, line 5 of the Eggert patent. Figure 3 is a view of a vertical section taken along the line 3-3 in Figure 2. Figure 3 shows the circular retainer 26 friction fitted in an axial hexagonal bore 23.

The second embodiment is shown in *Eggert*'s FIGS. 4, 5 and 6 as follows:

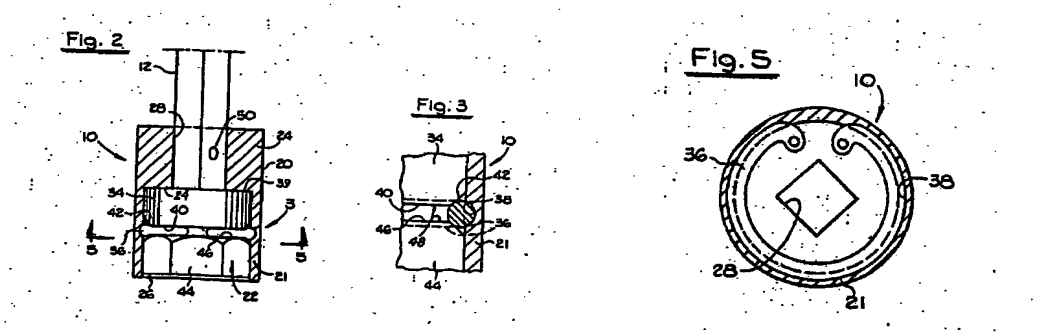


Second Embodiment of Eggert

In the second embodiment, an alternative bit holder is shown which is similar to bit holder 20 in the first embodiment, except the nature of the bore and retainer are different. More specifically, the bit holder of Figure 6 has a cylindrical body which has a circularly cylindrical axial bore 43 in addition to a hexagonal bore 45. See column 3, lines 48-55. Figure 6 shows that magnet 25 is dimensioned to fit freely in the cylindrical bore 43 and is held in place by a retainer 35 friction fitted in the hexagonal bore 45. See column 3, lines 59-64. Figures 4-6 show that the retainer 35 is formed of suitable plastic material and generally bowl-shaped and convex toward the magnet. See column 3, lines 35-47.

Eggert's original independent claim 1 recited the language "retaining structure in contact with the outer surface of said magnet and interference fitted in said bore to retain said magnet in said bore." Original claim 1's limitations, thus, encompassed *Eggert*'s both first and second embodiments.

In a rejection, the *Eggert* Examiner applied Parsons, US Patent No. 4,663,998 (shown in part as follows) for a teaching of the broadly claimed retaining structure.



Parsons Embodiment

Parsons shows in Figure 2 an axial sectional view of a magnetic wrench socket 10. Figure 2 shows magnet 34 held in a cylindrical bore by means of a C ring 36. See column 1, lines 35-65, of Parsons. Figure 3 of Parsons is a large-scale sectional view of a portion of Figure 2 indicated by arrow 3. Figure 3 shows the C ring 36 releasably held in a peripheral groove 38 formed in the wall 21. See column 1, lines 29 and 30, and lines 60-65. Figure 5 of Parsons shows a sectional view taken at line 5-5 of Figure 2 and shows C ring 36 releasably held in peripheral groove 38 formed in the wall 21. See column 1, lines 34 and 35, and lines 60-65. Thus, Parsons describes what in essence is a third embodiment covered by the language of *Eggert*'s original claim 1.

In response to the Examiner's rejections applying Parsons to the claimed retaining structure, *Eggert*'s Applicant eventually rewrote dependent claim 6 into independent form. Claim 6 added the limitation of "said retaining member being generally bowl-shaped and convex toward said magnet" to claim 1. This claim language corresponds only to the second embodiment disclosed in *Eggert*'s Figures 4, 5 and 6. That is, note that such non-generic language excluded *Eggert*'s disclosed first embodiment which is a flat, circular metal disk 6. The examiner entered the amendment and allowed the claim and the *Eggert* patent issued.

Subsequently, in the *Eggert* reissue, *Eggert*'s Applicant attempted to correct the overly-narrow claim limitation by reissue. More particularly, *Eggert*'s Applicant presented new reissue independent claims 15 and 22 which were of sufficient scope to not only cover both of their disclosed FIGS. 2-3 and FIGS. 4-6 embodiments, but also distinguish over the C ring of Parsons. For example, the new language of claim

15 read "a discrete retaining member friction fitted in said bore outboard of said magnet and substantially covering said outer surface of said magnet to retain said magnet in the bore." The scope of this language included both the first and second embodiments of *Eggert*'s invention, and as recognized by the *Eggert* Examiner, was free of the prior art of record.

Eggert's application (like the present application), was then rejected based on the "reissue recapture rule." On a first round of USPTO appeal, the *Eggert* Examiner asked an initial 3-person USPTO Board to impose a *per se* rule of reissue recapture to prevent the *Eggert* appellant from retreating from any claim limitation determined to have secured allowance of the original patent. The Examiner **LOST** in the first round of appeal. After losing upon decision of a 3-person Board, the *Eggert* Examiner got a **second** round, full-panel reconsideration and urged the full Board again to reverse the prior decision and to adopt the *per se* rule. The **full Board also rejected the *per se* rule**, and allowed the *Eggert* appellant to use reissue **to retreat from the original overly limiting claim limitations**.

The effect was that *Eggert*'s appellant was **not limited** to the "retaining member being generally bowl-shaped and convex toward said magnet" limitations of the patented claims. Instead, *Eggert*'s Applicant was able to obtain broader new reissue independent claims 15 and 22 which recited, for example, "a discrete retaining member friction fitted in said bore outboard of said magnet and substantially covering said outer surface of said magnet to retain said magnet in the bore." The scope of this language included both of *Eggert*'s FIGS.1-2 and FIGS. 4-6 embodiments.

Accordingly, it is clear that Reissue Applicants are NOT stuck with the patented claims, but instead, Reissue may be used to supplement and/or broaden erroneous (*e.g.*, overly restrictive) claims. This Board finding makes sense in that, if a *per se* reissue recapture rule were always applied/applicable, such would totally negate the need for having any reissue procedure within the USPTO.

Even going beyond the *Eggert* decision, a primary purpose of the reissue statue is to enable the addition of claims to subject matter not claimed in the original patent. As one example, in *C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1354, 48 USPQ2d 1225, 1234 (Fed. Cir. 1998), a reissue patent was allowed to add claims to a needle for use in a biopsy gun, whereas the original patent claimed only the biopsy gun. As will be seen in the discussions ahead, Applicant's claims 37-59 are directed toward the addition of claims to subject matter not claimed in the original patent.

Regarding claiming subject matter not claimed in the original patent, MPEP §1412.01 states that claims presented in a reissue application are considered to satisfy the requirement of 35 USC §251 that the claims be "for the invention disclosed in the original patent" where:

> (A) the claims presented in the reissue application are described in the original patent specification and enabled by the original patent specification such that 35 USC §112 first paragraph is satisfied; and
> (B) nothing in the original patent specification indicates an intent not to claim the subject matter presented in the reissue application.

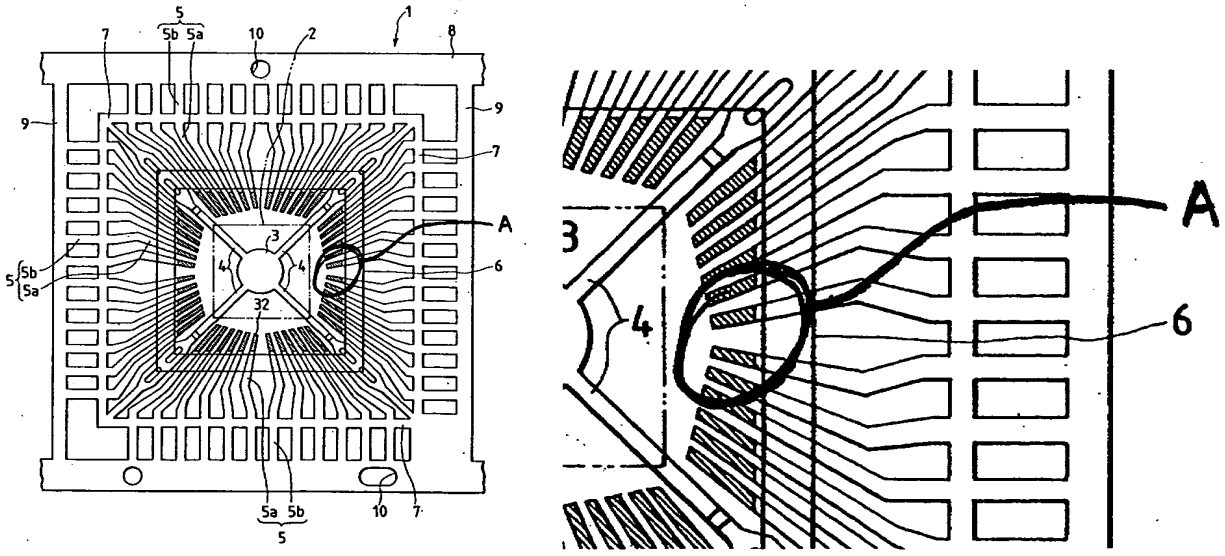
For convenience, these will be referred to as "§251's requirement (A)" and "§251's requirement (B)" in the discussions ahead.

Claims 37-43:

Discussion turns now to the application at hand, and first to Claims 37-43. The 35 USC §251 recapture rejection of Applicant's claims 37-43 is respectfully traversed. More particularly, as mentioned above, MPEP §1412.01 explicitly allows a reissue Applicant to claim an invention disclosed within Applicant's original disclosure even if it was not claimed in the original patent. Applicant's Claims 37-43 invention are directed toward a "framed insulating tape" combination invention.

That is, independent Claims 37, 40 and 42 (and claims dependent therefrom) claim embodiments (*e.g.*, Applicant's FIG. 1 reproduced below) "wherein a size of said chip mounting portion (3) is smaller than that of said semiconductor chip, and wherein **said insulating tape (6) has a frame shape and is continuously formed between said suspension leads and said plurality of leads (5a).**"

FIG. 1



Applicant's FIG. 1 Embodiment

Such "insulating tape" feature (like the "needle" of the *C.R. Bard, Inc. v. M3 Systems, Inc.* case mentioned above) was not claimed within the patented claims, but is now sought to be claimed within Applicant's reissue application as a combination invention together with a small chip mounting portion (*i.e.*, pad).

It is noted (as such may be relevant to traversal discussions ahead) that Applicant's disclosed "insulating tape" embodiment includes gold (Ag) plated wire bonding regions 32 (shown enlarged, for example, in the circled region "A" above, as the darkened cross-hatched areas). Such regions 32 allow important wire bonding, to facilitate wiring connections between ones of the leads 5a and connection spots on the die.

Regarding §251's requirement (A) mentioned above, Applicant's FIGs. 1, 8, 11a, 12, 13, 15, 16, 18, 21, 23, 24, 29 clearly illustrate arrangements "wherein a size of said chip mounting portion is smaller than that of said semiconductor chip, and wherein **said insulating tape has a frame shape and is continuously formed between said suspension leads and said plurality of leads.**" Even beyond illustration within the FIGs., Applicant's patented column 5, last full paragraph, also describes Applicant's "frame-shaped tape 6." Accordingly, it is respectfully submitted that §251's requirement (A) that the invention (described in the claims presented in the reissue application) be described in the original patent specification and enabled by the original patent specification such that 35 USC §112 first paragraph is satisfied, has been met. Regarding §251's requirement (B), it is respectfully submitted that nothing in Applicant's patent specification indicates intent not to claim such combination invention subject matter. Hence, both requirements (A) and (B) of

35 USC §251, that the claims be "for the invention disclosed in the original patent," have been satisfied, making Claims 37-43 proper claims/subject matter for this reissue.

In addition to §251 requirements, Claims 37-43 also (like the *Eggart* reissue claims) sufficiently distinguish over the art of record. More particularly, it is respectfully submitted that the 35 USC §103 rejection of such claims based upon Frechette *et al.*, US Patent No. 4,868,638, in view of Hagiwara *et al.*, JP 64-076745, fails as follows.

That is, a main and critical goal of the Frechette *et al.* reference is to teach generic lead frame arrangements which are easily customizable (via punching) to different die sizes. More particularly, the following left-hand Frechette *et al.* FIGs. 2 and 5 (see next page) illustrate alternative Frechette *et al.* generic lead frames, whereas the following right-hand Frechette *et al.* FIGs. 4 and 7 illustrate examples where such lead frames have been die-size customized by imposing cuts 52, 70 via lead-punching. Frechette *et al.* contains absolutely no disclosure regarding any insulating tape.

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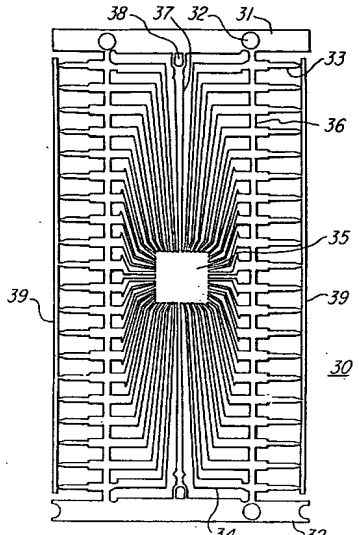

Fig.2

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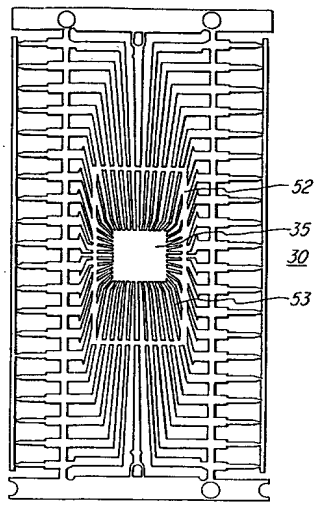

Fig.4

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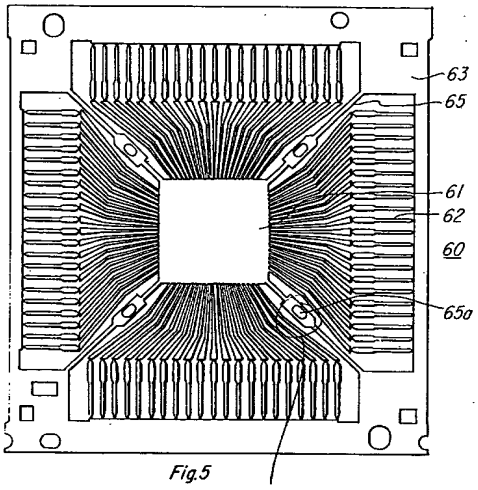

Fig.5

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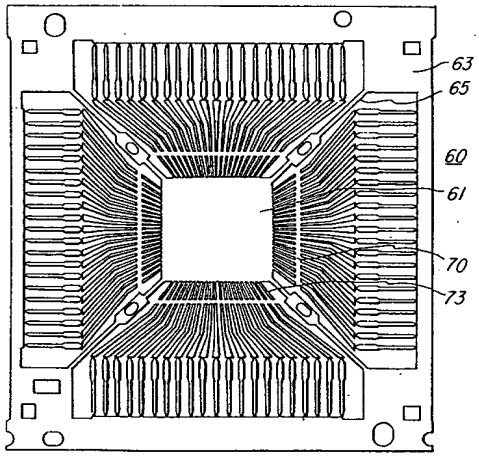
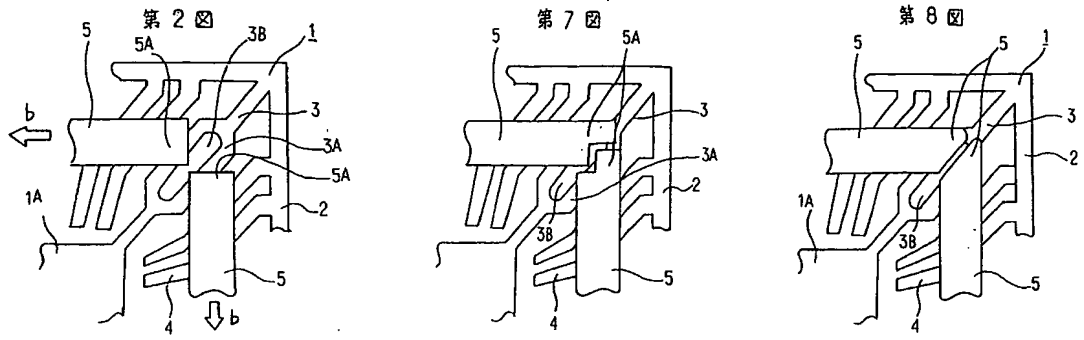


Fig.7

Frechette *et al.* FIGs. 2, 4, 5 and 7

Hagiwara *et al.* (as a secondary reference) illustrates insulating tape arrangements directed toward preventing lead frame deformation due to thermal contraction of the tape. To accomplish the same, Hagiwara *et al.*'s FIGs. 2, 7 and 8

(see reproduction below) disclose three alternatives where end-portions 5a of neighboring (separate) insulating tapes 5 are fixed on respective (opposing) parts of tab hanging lead 3's forked structure 3A as follows:



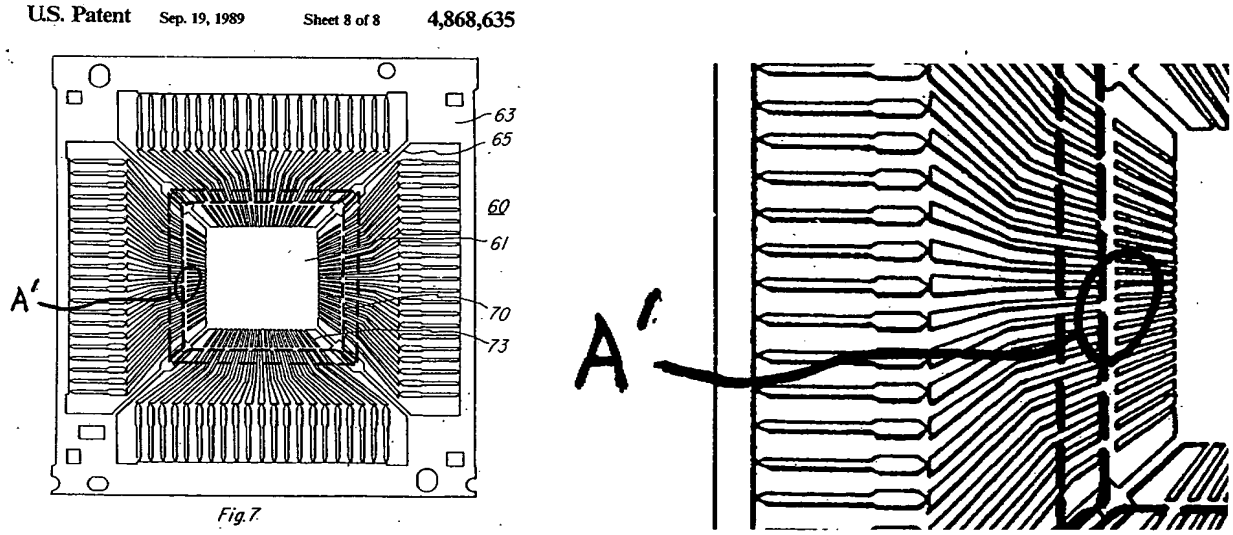
Hagiwara et al.'s FIGS. 2, 7 and 8

Since the end portions of neighboring insulating tapes 5 are fixed to opposing forks 3A, any forces due to thermal contraction of the tapes 5 will cause pulling on opposing forks 3A so as to somewhat cancel and avoid deformation. Regarding tape **location**, it is important (for the sake of traversal argument) to note that Hagiwara *et al.* (similar to Applicant's invention) teaches insulating tape bonding **at the hanging lead 3's forked structure 3A**.

Turning now to traverse the applied Frechette *et al.*/Hagiwara *et al.* combination, it is initially noted that Hagiwara *et al.*'s disclosure teaches two different embodiments which will now be discussed separately. More particularly, regarding the first embodiment, Hagiwara *et al.*'s insulating tape is wholly incompatible with Frechette *et al.*'s FIGs. 2-4 embodiment. That is, such embodiment has only two tie

bars 37 on opposing sides of Frechette *et al.*'s bar pad 35 (see above Frechette *et al.*'s FIGs. 2, 4), and accordingly, there is no logical way to dispose Hagiwara *et al.*'s insulating tapes 5 in a straight line between the FIGs. 2-4 tie bars 37. Hence, Hagiwara *et al.*s' FIGs. 2-4 provide no incentive to combine with the teachings of Frechette *et al.*

Regarding Frechette *et al.*'s second FIGs. 5-7 embodiment, Frechette *et al.*'s FIG. 7 is reproduced below, with dashed lines showing Hagiwara *et al.*'s insulating tapes disposed between forked-portions 65a of Frechette *et al.*'s tie bars 65.



Frechette *et al.*'s FIG. 7 modified with Hagiwara *et al.*'s insulating tapes

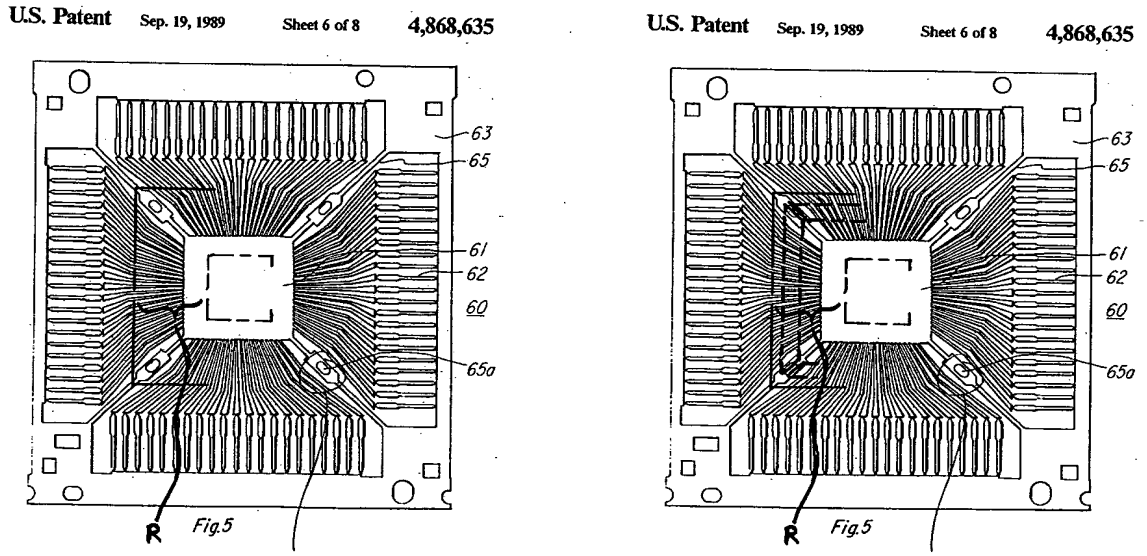
However, it is respectfully noted that such disposal of Hagiwara *et al.*'s insulating tapes onto Frechette *et al.*'s leadframe would render such combination unusable, in that there is absolutely no portion for wire-bonding to Frechette *et al.*'s

external leads, and/or, such would interfere with Frechette *et al.*'s objective of having a generic lead frame arrangement easily customizable to different die sizes. More particularly, lack of a wire-bonding portion is illustrated more clearly in the right-hand magnified view (especially within the example area " A' ". That is, ends of the Frechette *et al.* external leads would be completely covered by Hagiwara *et al.* insulating tape.

Regarding modification, Hagiwara *et al.* would teach away from moving the insulating tape to a differing location, **as Hagiwara *et al.* specifically and critically teaches disposal of the insulating tape to forked-portions of a hanging lead**. Moving the insulating tape off of the forked-portion would destroy Hagiwara *et al.*'s central disclosure. Further, Frechette *et al.* would teach away from any long bonding wires extending over the insulating tape, *i.e.*, Frechette *et al.*'s column 3, lines 4-5, teach "...wires of excessive length would...likely...cause problems." Further, Frechette *et al.* would teach away from moving Frechette *et al.*'s widened tie bar section 65a for varying die sizes (so as to correspondingly move the insulating tape therewith), in that Frechette *et al.* has one main purpose of providing a single generic "one-size-fits-all" leadframe arrangement which itself can be customized to varying die sizes simply through lead-punching.

In short, putting the Office Action's alleged combination aside, it is respectfully submitted that Frechette *et al.* **itself** appears to **purposefully not utilize insulating tape** on its leads, **so as to provide maximized versatility in terms of customizing to differing die sizes**. That is, lack of insulating tape allows Frechette *et al.*'s lead frame to be customized (*i.e.*, punched) to a wide range of die sizes. For example,

the left-handed copy of Applicant's FIG. 5 modified below illustrates (in long/short dashed lines) one end of the die size range as a die size smaller Frechette *et al.*'s bar pad 61, and the other end of the range (again shown in long/short dashed lines) as a die size extending out beyond Frechette *et al.*'s widened tie bar section 65a. Thus, Frechette *et al.*'s arrangement (through appropriate lead punching) could accommodate die sizes fitting anywhere within the wide range designated as "R" in the left-hand FIG. below.



In contrast, as seen in the right-hand copy of Applicant's FIG. 5 modified above, attempting to suddenly add an insulating tape (shown by short dashed lines) drastically interferes with and/or reduces such range. That is, approximately half the range would become unusable. Accordingly, the alleged Office Action combination would thus negate the wide versatility purpose of Frechette *et al.*, and therefore it is

respectfully submitted that that Frechette *et al.* provides no, or even negative, incentive for the alleged combination.

To conclude the traversal, it is respectfully submitted that combination of the Frechette *et al.* and Hagiwara *et al.* teachings would render an unusable combination and/or destroy utility of one or more of the references. It is well settled in U.S. patent law that if combination would lead to an unusable combination or destroy utility of the references, then such references themselves do not suggest combination. It is respectfully submitted that the present Frechette *et al.*/Hagiwara *et al.* rejection appears to be based solely on an improper hindsight attempt at rejection.

In conclusion, it is respectfully submitted that such Claims 37-43 (*i.e.*, like the *Eggert* and *C.R. Bard, Inc.* opinions discussed above), correct an error within the patent of not having claimed a framed "insulating tape" combination invention, while at the same time sufficiently distinguishing over the art of record. Accordingly, reconsideration and withdrawal of the "recapture" and §103 rejections of such claims, are respectfully requested.

Claims 44-49:

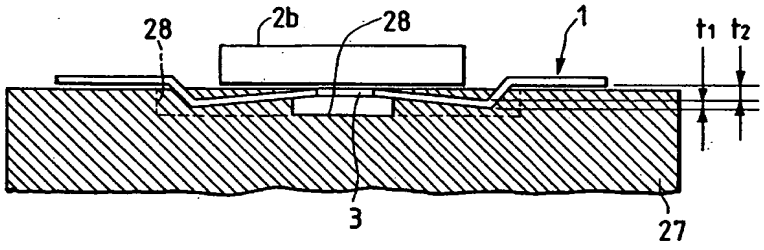
The 35 USC §251 recapture rejection of Applicant's Claims 44-49 is respectfully traversed. More particularly, as mentioned above, MPEP §1412.01 explicitly allows a reissue Applicant to claim an invention disclosed within Applicant's original disclosure, even if it was not claimed in the original patent. Applicant's

Claims 44-49 invention are directed toward a "spaced suspension lead" combination invention.

That is, independent Claims 44 (and Claims 45-48 dependent therefrom) claim embodiments (*e.g.*, Applicant's FIG. 28(a) reproduced below) "wherein a size of said chip mounting portion is smaller than that of said semiconductor chip, and wherein said semiconductor chip is mounted on said chip mounting portion, such that said rear surface of said semiconductor chip is bonded to the side of said first surface of said chip mounting portion by an adhesive layer, and **such that a part of each of said suspension leads, which is located under said semiconductor chip, is spaced from said rear surface of said semiconductor chip**."

Independent claim 49 has alternative, but similar, limitations regarding resin between the chip and spaced suspension leads.

FIG. 28(a)



Applicant's FIG. 28(a) Embodiment

Such "spaced suspension lead" feature (like the "needle" of the *C.R. Bard, Inc. v. M3 Systems, Inc.* case mentioned above) was not claimed within the patented

claims, but is now sought to be claimed within Applicant's reissue application as a combination invention together with a small chip mounting portion (*i.e.*, pad).

The spaced suspension lead feature is advantageous in that resin gets to directly adhere to increased areas of a backside (*i.e.*, bottom) of a mounted die. Since adhesion of the interface between the semiconductor chip (of silicon) and the resin is stronger than that of any interface between the die pad (of metal) and the resin, moisture (which turns to steam during solder reflow and induces cracking) can be prevented from invading into an interface between the die pad and resin. Thus, it is possible to suppress moisture and thus package body cracking which might otherwise be caused when the LSI package is to be mounted on a substrate by solder reflow.

Regarding §251's requirement (A) mentioned above, Applicant's FIG. 28(a) clearly illustrates an arrangement "wherein a size of said chip mounting portion is smaller than that of said semiconductor chip, and wherein ...**a part of each of said suspension leads, which is located under said semiconductor chip, is spaced from said rear surface of said semiconductor chip**." Accordingly, it is respectfully submitted that §251's requirement (A), that the invention (described in the claims presented in the reissue application) be described in the original patent specification and enabled by the original patent specification such that 35 USC §112 first paragraph is satisfied, has been met. Regarding §251's requirement (B), it is respectfully submitted that nothing in Applicant's patent specification indicates intent not to claim such combination invention subject matter. Hence, both requirements (A) and (B) of 35 USC §251 that the claims be "for the invention disclosed in the

original patent" have been satisfied, making Claims 44-49 proper claims/subject matter for this reissue.

In addition to §251 requirements, Claims 44-49 also (like the *Eggart* reissue claims) sufficiently distinguish over the art of record. More particularly, the Office Action recognizes/admits that Claims 44-49 distinguish over the art of record, given that no §§102/103 rejections are applied within the Office Action against such claims.

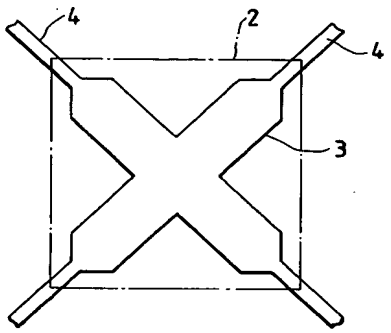
In conclusion, it is respectfully submitted that such Claims 44-49 (*i.e.*, like the *Eggert* and *C.R. Bard, Inc.* opinions discussed above), correct an error within the patent of not having claimed a "spaced suspension lead" combination invention, while at the same time sufficiently distinguishing over the art of record. Accordingly, reconsideration and withdrawal of the "recapture" rejection of such claims, are respectfully requested.

Claims 50-59:

The 35 USC §251 recapture rejection of Applicant's claims 50-59 is respectfully traversed. More particularly, as mentioned above, MPEP §1412.01 explicitly allows a reissue Applicant to claim an invention disclosed within Applicant's original disclosure even if it was not claimed in the original patent. Applicant's

Claims 50-59 are directed toward a "(flag-less) suspension lead" combination invention as shown by Applicant's FIG. 32 as follows:

FIG. 32



Applicant's FIG. 32

That is, the claim embodiments of independent Claim 50 (and Claims 51-54 dependent therefrom), *e.g.*, Applicant's FIG. 32 reproduced above, include "a first suspension lead for supporting said semiconductor chip, extending in a first direction; a second suspension lead for supporting said semiconductor chip, extending in a second direction which is different from said first direction, said second suspension lead intersecting said first suspension lead; and...wherein said semiconductor chip is disposed on said intersecting portion of said first and second suspension leads, wherein a width of each of said first and second suspension leads at the vicinity of said intersecting portion is wider than that of each said first and second suspension leads at vicinities beyond said semiconductor chip, and wherein said rear surface of said semiconductor chip is fixed to said first and second

suspension leads at the vicinity of said intersecting point by an adhesive." That is, it is respectfully noted that there is no "chip mounting portion" claimed. Independent Claim 55 (and claims dependent therefrom) have analogous limitations.

That is, for a proper understanding of Claims 50-59, an initial discussion of patented independent Claim 1 may be helpful/appropriate, and hence, such discussion is now provided herewith as follows. More particularly, independent Claim 1 recites "a leadframe having: a chip mounting portion for mounting said semiconductor chip; suspension leads unitarily formed with said chip mounting portion, a width of said chip mounting portion being wider than a width of each of said suspension leads." That is, note that there is both a **mounting portion** and **suspension leads**.

Subsequent review of such claim related to the present reissue process revealed that such Claim 1 limitations may be too narrow. More particularly, a potential infringer might (in a bid to avoid infringement) leave out the "chip mounting portion" or "flag", and then attempt an argument that the claimed "chip mounting portion" covered "flagged" chip supporting arrangements, but did not cover "flag-less" chip supporting arrangements. Not covering a "flag-less" arrangement is another error within the present patent, which is attempted to be corrected by the present Reissue application.

Description/understanding of "flagged" verses "flag-less" may be helpful in understanding the present situation; hence, attention is now directed to the following Applicant's FIGS. 31-32 for a "flagged" verses "flag-less" explanation.

FIG. 31

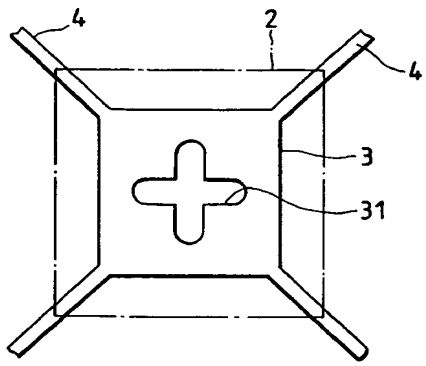
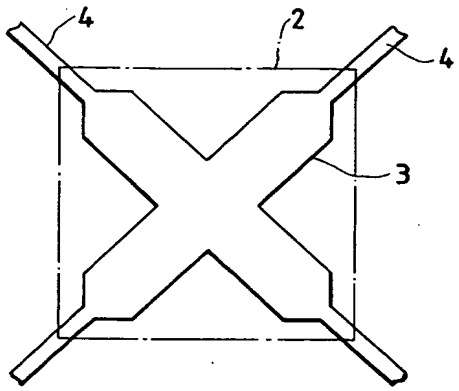


FIG. 32



Applicant's FIGS. 31 and 32

Applicant's FIG. 31 represents a "flagged" arrangement as is understood in the art (*i.e.*, note that the rectangle in FIG. 31 resembles a flag; in the art, the flag also may be circular). In contrast, Applicant's FIG. 32 represents a "flag-less arrangement.

It is respectfully submitted that such "flag" and "flag-less" terminology is known in the art. More particularly, as one example usage in the art, the reference of record to Djennas *et al.* (US Patent No. 5,327,008) illustrates/describes a plurality of differing die-supporting arrangements, including rectangular mini-flag, circular

mini-flag AND flag-less arrangements. Ones relevant to the present discussions are shown in the Djennas et al. FIGS. 1, 4 and 6 as follows.

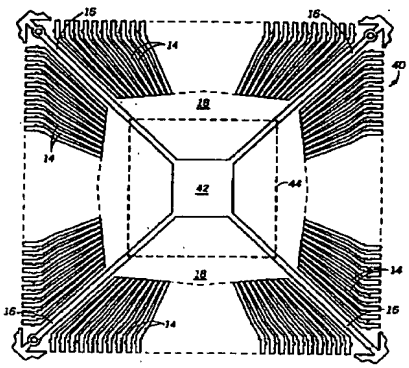


FIG.4

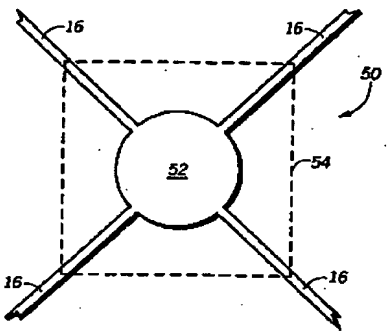


FIG.6

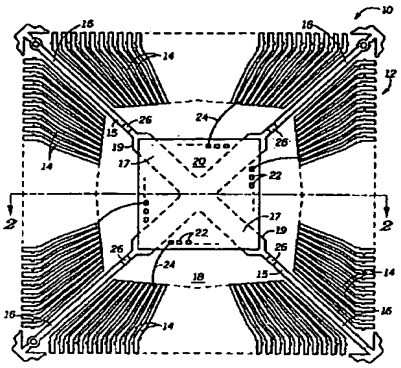


FIG.1

Djennas *et al.*. FIGs. 1, 4 and 6

Column 6, lines 14-21 of Djennas *et al.* describes that the above-reproduced "FIG. 4 illustrates, in a top-down plan view, portions of a lead frame 40 having such a mini-flag 42. Mini-flag 42 is kept smaller in area than a semiconductor die (illustrated in phantom as line 44) to keep the total interface area between the mini-flag and a plastic encapsulation material (not illustrated) smaller than in conventional devices." Next, Column 6, lines 45-48 of Djennas *et al.* describes that the above-reproduced FIG. 6 "portions of a lead frame 50 (only partially illustrated) can include a round mini-flag 52 to support a large die (illustrated in phantom as line 54)."

Most importantly, and most relevant to the present situation, Column 4, lines 35-37 of Djennas *et al.* describes that the above-reproduced FIG. 1 "device 10 does

not employ a flag. Instead, die 20 rests on tie bars 16." Accordingly, the FIG. 1 arrangement of Djennas *et al.* is a "flag-less" arrangement somewhat similar to Applicant's FIG. 32 previously illustrated in this paper.

Accordingly, with the above understanding of "flagged" verses "flag-less", Applicant's present independent Claims 50 and 55 (and claims dependent therefrom) are directed toward claiming a semiconductor device utilizing a "flag-less" arrangement (as was mentioned previously).

[It is noted that Djennas *et al.*'s FIG. 1 arrangement has "wide" portions that extend **beyond** the Djennas *et al.* chip. Further, note that Djennas *et al.* is removeable as prior art, given that it has an effective filing date of 22 March 1993, whereas Applicant's foreign priority application has a filing date of 27 March 1992.]

Regarding §251's requirement (A) mentioned above, Applicant's FIG. 32 clearly illustrate a flagless arrangement having "a first suspension lead...a second suspension lead...wherein a width of each of said first and second suspension leads at the vicinity of said intersecting portion is wider than that of each said first and second suspension leads at vicinities beyond said semiconductor chip." Accordingly, it is respectfully submitted that §251's requirement (A), that the invention described in the claims presented in the reissue application be described in the original patent specification and enabled by the original patent specification such that 35 USC §112 first paragraph is satisfied, has been met. Regarding §251's requirement (B), it is respectfully submitted that nothing in Applicant's patent specification indicates intent not to claim such combination invention subject matter. Hence, both requirements (A) and (B) of 35 USC §251 that the claims be "for the invention disclosed in the

original patent" have been satisfied, making claims 50-59 proper claims/subject matter for this reissue.

In addition to §251 requirements, Claims 50-59 also (like the *Eggart* reissue claims) sufficiently distinguish over the art of record. More particularly, the Office Action recognizes/admits that Claims 50-59 distinguish over the art of record, given that no §§102/103 rejections are applied within the Office Action against such claims.

In conclusion, it is respectfully submitted that such Claims 50-59 (*i.e.*, like the *Eggert* and *C.R. Bard, Inc.* opinions discussed above), correct an error within the patent of not having claimed a "(flag-less) suspension lead" combination invention as shown by Applicant's FIG. 32, while at the same time sufficiently distinguishing over the art of record. Accordingly, reconsideration and withdrawal of the "recapture" rejection of such claims are respectfully requested.

REJECTION UNDER 35 USC §103

For the purposes of clarity and convenience, the following discussions will use the previously-pending claim numbers, *i.e.*, Claims 37-39, solely to coincide with the specific rejections detailed hereinbelow.

The 35 USC §103 rejection of Claims 37-39 as being unpatentable over Frechette *et al.* (US 4,868,638) in view of JP 64-76745 is respectfully traversed, for the reasons set forth in the "recapture" section above.

As a result of all of the foregoing, it is respectfully submitted that the applied art (taken alone and in the Office Action combinations) would not support a §103

obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such §103 rejection, and express written allowance of all of the §103 rejected claims, are respectfully requested.

RESERVATION OF RIGHTS

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer. That is, any above statements, or any present amendment or cancellation of claims (all made without prejudice or disclaimer), should not be taken as an indication or admission that any objection/rejection was valid, or as a disclaimer of any scope or subject matter. Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, i.e., Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

EXAMINER INVITED TO TELEPHONE

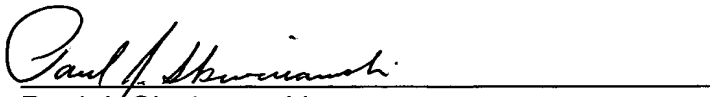
The Examiner is invited to telephone the undersigned at the local D.C. area number 703-312-6600, to discuss an Examiner's Amendments or other suggested action for accelerating prosecution and moving the present application to allowance.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that all claims in this divisional reissue application are now in condition for allowance. Accordingly, allowance of all such claims is respectfully requested.

Applicant respectfully petitions the Commissioner for an appropriate extension of the shortened statutory period for response set by the Office Action dated 1 April 2004. A Form PTO-2038 authorizing payment of the requisite Petition and claim fees is attached hereto. Please charge any deficits in fees to ATS&K Deposit Account No. 01-2135 (as Order No. 501.32049RV2).

Respectfully submitted,



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Attachment:
Form PTO-2038 (Fee Codes 1202/1252)